UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/708,781	03/25/2004	I-Yin Li	ACMP0047USA	2780	
27765 7590 11/09/2007 NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506			EXAMINER		
			FRISBY, KESHA		
MERRIFIELD,	MERRIFIELD, VA 22116		ART UNIT	PAPER NUMBER	
			3714		
			NOTIFICATION DATE	DELIVERY MODE	
			11/09/2007	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com Patent.admin.uspto.Rcv@naipo.com mis.ap.uspto@naipo.com.tw

		Application No.	Applicant(s)	4		
<sup>2</sup> Office Action Summany						
		10/708,781	LI, I-YIN			
	Office Action Summary	Examiner	Art Unit			
	TI MAIL MO DATE COL	Kesha Frisby	3714			
Period fo	The MAILING DATE of this communication app r Reply	ears on the cover sheet with t	ne correspondence address			
WHIC - Exten after S - If NO - Failur Any re	DRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DASIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATED IN no event, however, may a reply rill apply and will expire SIX (6) MONTHS cause the application to become ABAND	TION. be timely filed from the mailing date of this communication. ONED (35 U.S.C. § 133).			
Status	•	·				
1)⊠	Responsive to communication(s) filed on 23 Au	<u>ıgust 2007</u> .				
, —	This action is <b>FINAL</b> . 2b) This action is non-final.					
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	х рапе Quayle, 1935 С.D. 11	1, 453 O.G. 213.			
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-18 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 1-18 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.	·	-		
Application	on Papers					
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	epted or b) objected to by a drawing(s) be held in abeyance. ion is required if the drawing(s) i	See 37 CFR 1.85(a). s objected to. See 37 CFR 1.121(d).			
Priority u	nder 35 U.S.C. § 119					
a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau see the attached detailed Office action for a list	s have been received. s have been received in Appl rity documents have been rec ı (PCT Rule 17.2(a)).	ication No eived in this National Stage			
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		mary (PTO-413) ail Date nal Patent Application			

Application/Control Number: 10/708,781

Art Unit: 3714

### DETAILED ACTION

## Status of Claims

After the amendment filed on 8/23/2007, claims 1-18 are pending. Claims 13-18 are newly added.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-4, 7, 8, 11-13, 17 & 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (U.S. Publication Number 2002/0160818) in view of Kaaresoja et al. (U.S. Publication Number 2002/0177471).

Referring to claim 1, Nelson et al. discloses an encoding module for encoding a text signal into a vibration signal, the text signal comprising a plurality of text data, each of the text data respectively encoded into a corresponding vibration data of the vibration signal by the encoding module (Decode/Encode Logic 330); and a vibrating module electrically connected to the encoding module for vibrating (Figure 3: and paragraph 0043). Nelson et al. does not disclose different text data corresponding to different vibration data and vibrating in different vibrating patterns which can be identified by a user, the vibration module vibrating correspondingly according to the vibration data of the vibration signal in sequence so that the user can recognize the vibration data due to different vibrations. However, Kaaresoja et al. teaches different text data corresponding

to different vibration data (paragraphs 0030 & 0032) and vibrating in different vibrating patterns (paragraph 0028) which can be identified by a user (paragraphs 0040-0042), the vibrating module vibrating correspondingly according to the vibration data of the vibration signal in sequence so that the user can recognize the vibration data due to different vibrations (paragraph 0024). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include different text data corresponding to different vibration data, as disclosed by Kaaresoja et al., incorporated into Nelson et al. in order to enrich the communication experience.

Referring to claim 2, Nelson et al., as modified by Kaaresoja et al., discloses wherein the communication apparatus further comprises a communicating module electrically connected to the encoding module for receiving the text message from a communication network (TX/RX 312 of Nelson et al.).

Referring to claim 3, Nelson et al., as modified by Kaaresoja et al., teaches wherein the vibration of the vibrating module has a vibration frequency equal to or less than a frequency of 10 Hz (paragraph 0032 & paragraph 0044 of Kaaresoja et al.).

Referring to claim 4, Nelson et al., as modified by Kaaresoja et al., teaches wherein the vibrating module comprises a vibrator (vibration device 132 of Nelson et al. and Vibration Motor 100 of Kaaresoja et al.) that is capable of vibrating in different frequencies (paragraph 0044 of Kaaresoja et al.) for vibrating in different vibrating patterns (paragraph 0028 of Kaaresoja et al.).

Referring to claim 7, Nelson et al., as modified by Kaaresoja et al., discloses wherein the vibrating module performs vibrations in different time durations to distinguish

Application/Control Number: 10/708,781

Art Unit: 3714

different vibration data (paragraph 0037 of Nelson et al.) in different vibrating patterns (paragraph 0029 of Kaaresoja et al.).

Referring to claim 8, Nelson et al., as modified by Kaaresoja et al., teaches wherein when the vibrating module performs vibrations in different amplitudes of vibrations to distinguish different vibrating data (paragraph 0044 of Kaaresoja et al.).

Referring to claim 11, Nelson et al., as modified by Kaaresoja et al., discloses wherein the communication apparatus further comprises an input interface for receiving instructions input from a user and generating a corresponding text signal which is transmitted to the communicating module afterward (first, second and third buttons and buttons 120 of Kaaresoja et al.).

Referring to claim 12, Nelson et al., as modified by Kaaresoja et al., discloses wherein the communication apparatus further comprises: a microphone for transforming sound waves to an electric audio signal (microphone 214 of Nelson et al.); and a speaker electrically connected to the communicating module for transforming an electric sound signal to a sound wave and broadcasting the sound wave (ear speaker 112 of Nelson et al.); wherein the communicating module is capable of transmitting the audio signal to the communication network and receiving the sound signal (TX/RX 312 of Nelson et al.).

Referring to claim 13, Nelson et al., as modified by Kaaresoja et al., teaches wherein the vibrating module comprises a vibrator that is capable of vibrating in different amplitudes (paragraph 0044 of Kaaresoja et al.) for vibrating in different vibrating patterns (paragraph 0028 of Kaaresoja et al.).

Referring to claim 17, Nelson et al. discloses an encoding module for encoding a text

Art Unit: 3714

signal into a vibration signal, the text signal comprising a plurality of text data, each of the text data respectively encoded into a corresponding vibration data of the vibration signal by the encoding module (Decode/Encode Logic 330); and a vibrating module electrically connected to the encoding module for vibrating (Figure 3: and paragraph 0043). Nelson et al. does not disclose different text data corresponding to different vibration data and vibrating in different frequencies, the vibrating module vibrating correspondingly according to the vibration data of the vibration signal in sequence so that the user can recognize the vibration data due to different vibrations. However, Kaaresoja et al. teaches different text data corresponding to different vibration data (paragraphs 0030 & 0032) and vibrating in different frequencies (paragraph 0044), the vibrating module vibrating correspondingly according to the vibration data of the vibration signal in sequence so that the user can recognize the vibration data due to different vibrations (paragraph 0024). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include different text data corresponding to different vibration data, as disclosed by Kaaresoja et al., incorporated into Nelson et al. in order to enrich the communication experience. Referring to claim 18, Nelson et al. discloses an encoding module for encoding a text signal into a vibration signal, the text signal comprising a plurality of text data, each of the text data respectively encoded into a corresponding vibration data of the vibration signal by the encoding module (Decode/Encode Logic 330); and a vibrating module

electrically connected to the encoding module for vibrating (Figure 3: and paragraph

0043). Nelson et al. does not disclose different text data corresponding to different vibration data and vibrating in different amplitudes, the vibrating module vibrating correspondingly according to the vibration data of the vibration signal in sequence so that the user can recognize the vibration data due to different vibrations. However, Kaaresoja et al. teaches different text data corresponding to different vibration data (paragraphs 0030 & 0032) and vibrating in different amplitude (paragraph 0044), the vibrating module vibrating correspondingly according to the vibration data of the vibration signal in sequence so that the user can recognize the vibration data due to different vibrations (paragraph 0024). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include different text data corresponding to different vibration data, as disclosed by Kaaresoja et al., incorporated into Nelson et al. in order to enrich the communication experience.

3. Claims 5 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al./Kaaresoja et al. and further in view of Korhonen et al. (U.S. Publication Number 2005/0130695).

Referring to claims 5 & 6, Nelson et al./Kaaresoja et al. discloses the communication apparatus of claim 1 and vibrating in different frequencies (paragraph 0044 of Kaaresoja et al.) in different vibrating patterns (paragraph 0028 of Kaaresoja et al.). Nelson et al./Kaaresoja et al. does not disclose wherein the vibrating module comprises a plurality of vibrators, whereby different vibrators vibrating in different frequencies and wherein the in different positions of the communication apparatus. However, Korhonen et al. teaches wherein the vibrating module comprises a plurality of vibrators (Fig. 4 &

paragraph 0025) and wherein the vibrators are disposed in different positions of the communication apparatus (see Fig. 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a plurality of vibrators, as disclosed by Korhonen et al., incorporated into Nelson et al./Kaaresoja et al. in order to generate stronger tactile effects.

4. Claims 9 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al./Kaaresoja et al. and further in view of Higuchi et al. (U.S. Patent Number 6,377,823).

Referring to claims 9 & 10, Nelson et al./Kaaresoja et al. discloses the communication apparatus of claim 2 and wherein the communication apparatus is a mobile phone (wireless mobile phone). Nelson et al./Kaaresoja et al. does not disclose wherein the communication apparatus further comprises a communicating module electrically connected to the encoding module for receiving the text message from a communication network. Nelson does disclose signals (claims 4, 21 & 47: signals). However, Higuchi et al. teaches wherein the communicating module is used to receive a radio signal (radio frequency signals). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include radio signals, as disclosed by Higuchi et al., incorporated into Nelson et al./Kaaresoja et al. so that radio signals can be transmitted and received.

5. Claims 14 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al./Kaaresoja et al. and further in view of Bright et al. (U.S. Publication Number 2002/0165013).

Referring to claims 14 & 15, Nelson et al./Kaaresoja et al. discloses the communication apparatus of claim 4 wherein the vibrator vibrates at different amplitudes (paragraph 0044). Nelson et al./Kaaresoja et al. does not disclose wherein the vibrator vibrates at a first frequency and a second frequency, the first frequency represents a character Dit, and the second frequency represents a character Dah. However, Bright et al. teaches wherein the vibrator vibrates at a first frequency and a second frequency, the first frequency represents a character Dit, and the second frequency represents a character Dah (paragraph 0045). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a vibrator that vibrates at different frequencies, as disclosed by Bright et al., incorporated into Nelson et al./Kaaresoja et al. in order to have certain frequencies represent certain things.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al./Kaaresoja et al. and further in view of Fujisawa et al. (U.S. Publication Number 2002/0115478).

Referring to claim 16, Nelson et al./Kaaresoja et al. discloses the communication apparatus of claim 1. Nelson et al./Kaaresoja et al. does not disclose wherein the vibrating module comprises a driving circuit and a vibrator, the driving circuit receives the vibrating signal and output different driving signals to the vibrator in different vibrating patterns. However, Fujisawa et al. teaches wherein the vibrating module comprises a driving circuit and a vibrator, the driving circuit receives the vibrating signal and output different driving signals to the vibrator in different vibrating patterns (paragraphs 0435 & 0489). It would have been obvious to one of ordinary skill in the art

Application/Control Number: 10/708,781 Page 9

Art Unit: 3714

at the time the invention was made to include wherein the vibrating module comprises a driving circuit and a vibrator, as disclosed by Fujisawa et al., incorporated into Nelson et al./Kaaresoja et al. in order to drive the vibrator to conduct notification.

## Response to Arguments

- 7. Applicant's arguments, see remarks page 7 and amended claim 8, filed 8/23/2007, with respect to Oath/Declaration and Claim Objections, respectively have been fully considered and are persuasive. The objection of the Oath /Declaration and the Claim Objections has been withdrawn.
- 8. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Note: The examiner has given the functional language (MPEP 2114) in these claims patentable weight, however, the examiner can argue that this functional language is an intended use recitation. Therefore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham, 2 USPQ2d 1647 (1987)*. In addition, it has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison, 69 USPQ 138*.

### Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ronkainen (U.S. Patent Number 6,850,150) teaches a portable device.

Eiden (U.S. Publication Number 2004/0067780) teaches vibrating a portable electronic device, method of vibrating a portable electronic device and a method of messaging by vibrating a portable electronic device.

### Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kesha Frisby whose telephone number is 571-272-8774. The examiner can normally be reached on Mon. - Wed. 7-3pm & Thurs. - Fri. 7-3:30pm.

Application/Control Number: 10/708,781

Art Unit: 3714

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronald Laneau

Primary Patent Examiner

Page 11

Art Unit 3714

Kyf 11/2/2007